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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,710	02/20/2002	Samuel Kerem	022002SK	7667
21398	7590	05/16/2005	EXAMINER	
CORVIS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 7015 ALBERT EINSTEIN DRIVE COLUMBIA, MD 210469400			WANG, LEMING	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,710

Applicant(s)

KEREM, SAMUEL

Examiner

Leming Wang

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4,5,12-14 is/are allowed.
- 6) ☒ Claim(s) 3,6-11 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 3 and 11 recites the limitation "the controllable DC power supply". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 6 –10, 15, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by *Tsunikawa* (US Patent No: 4,639,924)

Regarding claims 6 and 15, *Tsunikawa* teaches that an optical source driver for driving an optical source, comprising: a current source (Tr14, Fig.6A) having an input

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(Emitter of Tr14, Fig.6A) connected to an output of the optical source (Output of Laser diode LD1 through P, Fig.6A); a DC-DC converter (Tr11, Fig.6A) having a power input (Collector of Tr11, Fig.6A), a power output (Emitter of Tr11, Fig.6A) connected to an input of the optical source (Input of Laser diode LD1 through P, Fig.6A), and a control input (Base of Tr11, Fig.6A); an operational amplifier (OP11, Fig.6A) having a first input (Negative input port of OP11, Fig.6A) connected between the optical source and the current source (Negative input port of OP11 is connected to P, Fig.6A), a second input (Positive input port of OP11, Fig.6A), and an output (Output port of OP11, Fig.6A) connected to the control input of the DC-DC converter (Output port of OP11 is connected to the base of Tr11 through R11, Fig.6A); and an overhead controller (REG1) having an input (Input of REG1, Fig.6A) and an output (Output of REG1, Fig.6A) connected to the second input (Positive input port of OP11, Fig.6A) of the operational amplifier (OP11, Fig.6A).

Regarding claim 7, *Tsunikawa* teaches a control signal connected to the input of the overhead controller and wherein the current source has a second input (Collector of Tr14, Fig.6A) connected to the control signal (Control signal generated at alarm module 105 sent to collector of Tr14 and REG1 through Tr21, Figs.6A and 6B).

Regarding claim 8, 17, and 18, *Tsunikawa* teaches output of the overhead controller decreases as the control signal indicates increasing the output level of the

optical (As output of REG1 decreases, the output of OP11 increases, which drives Tr11 output more current to LD1 to increase the optical output of LD1, Fig.6A).

Regarding claims 9 and 19, *Tsunikawa* teaches output of the overhead controller increases as the control signal indicates decreasing the output level of the optical (As output of REG1 increases, the output of OP11 decreases, which cause Tr11 output to decrease the driving current to LD1 and decrease the optical output of LD1, Fig.6A).

Regarding claims 10 and 20, *Tsunikawa* teaches overhead controller operates to produce a constant overhead power (When there is no alarm controlling signal generated, REG1 output is stable and optical output power of LD1 is a constant, Figs.6A and 6B; Col.7, lines 42-45).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Tsunikawa* (US Patent No:4,639,924) in view of *Gibbs* (5,463,648)

Regarding claims 11 and 16, as it is understood in view of above 112 problem for claim 11, *Tsunikawa* differs from the claimed invention in that *Tsunikawa* does not teach a storage capacitor is connected to the output of the controllable DC power supply, and the input to the optical source that stores energy to be used to drive the optical source.

However, Gibbs from the same field of endeavor teaches how to use a capacitor connected to the output of power supply and the input of optical source (C22, Fig.1; Col.3, lines 59-63). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to incorporate a capacitor, such as the one of Gibbs, been connected in between a power supply and a optical source in order to prevent an optical pulse from drooping in pulse forming operation.

Allowable Subject Matter

7. Claim 1, 2, 4, 5, 12-14 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. *Miyasaka et al.*, (4,964,010) is about laser driver with a circuit for limiting the time integration value of current flowing in current circuit.

2. *Inoue*, (6,469,455) is about driving circuit for light emitting element.

3. *Holland*, (4,237,427) is about apparatus for stabilizing laser operation.

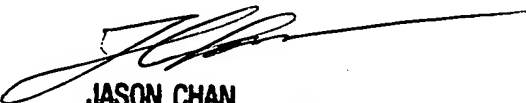
4. *Morita et al.*, (6,091,747) is about laser driver with biasing circuit.
5. *Miller* (4,484,331) is about regulator for biasing of laser diode.
6. *Zelenka et al.* (5,313,482) is method to correct output power of laser diode.
7. *Crawford* (6,587,490) is about low noise driver for laser diodes.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leming Wang whose telephone number is 571 272 3030. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272 3112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lw


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